DOCUMENT RESUME

ED 457 344 CE 082 352

AUTHOR Hudson, Larry
TITLE Preparation of Vocational Education Teachers: Areas of Importance and Concern.
PUB DATE 2000-09-18
NOTE 13p.; Paper presented at a meeting on Workforce Development Education Educator Preparation (Orlando, FL, September 18, 2000).
PUB TYPE Opinion Papers (120) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Education Work Relationship; *Educational Change; Educational Needs; Educational Quality; Educational Trends; *Faculty Development; Higher Education; Policy Formation; Preservice Teacher Education; Program Improvement; State Programs; Statewide Planning; *Teacher Certification; *Teacher Education; *Teacher Education Programs; Teacher Educator Education; Tech Prep; *Vocational Education Teachers
IDENTIFIERS *Florida; Ranking

ABSTRACT

This concept paper addresses the preparation of vocational education teachers. Several topics are listed with comments, and, in some cases, supporting documentation has been abstracted. These topics correspond to reasons for the lack of national visibility within Florida as indicated by the 2001 rankings in the U.S. News and World Report that identified no universities in Florida as being leaders in vocational technical education (VTE). These reasons are discussed: Florida has historically had a teacher service orientation; certification has driven university VTE programs' offerings; state universities in Florida have not generally established areas of expertise for research, while some have even dropped VTE teacher preparation programs; strong graduate programs and federally funded research are indicators of ranked university VTE programs; lack of communication; and participation in the various "trends" such as school-to-work, tech prep, and workforce development has not been established. (YLB)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 457 344

Preparation of vocational education teachers: areas of importance and concern

Prepared for
Workforce Development Education Educator preparation
September 18, 2000
Orlando, FL

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
L. Hudson
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

Larry Hudson, Ph.D.
University of Central Florida
lhudson@mail.ucf.edu
http://reach.ucf.edu/~voced

CE 082 352

BEST COPY AVAILABLE

Overview:

Since this meeting and the ensuing conference are about the preparation of Vocational Education (VE) Teachers, a "Concept paper" is proposed for discussion. Several topics are listed below with comments, and in some cases supporting documentation has been abstracted. The time has certainly come for Florida to lead the nation in a coordinated plan to prepare people as qualified and caring VE teachers.

The May 1999 issue of Techniques, official magazine of the Association for Career & Technical Education was devoted to "Solving the teacher shortage". Referencing an earlier research report by Lynch, R. (1991) "In search of vocational teacher education" the article offered this warning 'that the nation's colleges and universities had

> "greatly diminished their capacity to prepare teachers for vocational and technical education programs" (p.13).

The prediction by Professor Lynch was that

> "a shortage (exists) of teachers well-prepared to teach in new or modified work-based education programs, technology, and technological programs" (p.13).

There is still a shortage of Technology Education teachers as noted by a 1998 national level report (Teacher supply and demand in the United States, American Association for Employment in Education) and current notation of a Critical Teacher Shortage in Florida for the same group of teachers.

Providing VE teachers has traditionally been accomplished through university programs, either as pre- or in-service. What status do the State Universities have in the US as related to Vocational technical Education? In the recent 2001 report by the U.S. News and World Report no universities in Florida were included in the rankings as being leaders in Vocational Technical Education. Rankings were based upon:

a. Reputation (40 percent)
b. Student selectivity (20 percent)
c. Faculty resources (20 percent)
d. Research activity (20 percent)

(http://www.usnews.com/usnews/edu/beyond/gradrank/gbedusp8.htm)

My thoughts are that there are multiple reasons for this lack of national visibility within Florida:

- Florida has historically had a (teacher) service orientation
- Certification has driven university VTE programs' offerings
- State universities in Florida have not generally established areas of expertise for research while some have even dropped VTE teacher preparation programs
- Strong graduate programs and federally funded research are indicators of ranked university VTE programs
- A lack of communication and participation in the various "trends" such as STW, Tech-prep, and Workforce has not been established

Questions for consideration:

- Who are the primary constituents involved in the preparation of VE teachers?
- To what extent is each constituent interested in supporting VE teachers—both pre-service and in-service?
- What historical constraints exist which impede more modern preparation of VE teachers?
- What skills are actually needed by, and supported through research, of entering and experienced VE teachers?
- How can the State of Florida design and support a structure for development and support of VE teachers?

Of course, there are many other questions; probably more questions than answers. However, starting with this meeting will hopefully lead to regular communication and a concerted effort to support this vital group of professional educators.

Procedure used in developing this "Concept Paper"

This was designed using "Inspiration" a concept mapping graphical software program (http://inspiration.com). Embedded in this software is a technique termed "rapidfire" or as we commonly term it "brainstorming". Initially, I used "rapidfire" to list several major ideas, then followed each up by brainstorming again to develop the attached graphic. After completing the list the "Outline" function was used to review and add quoted research passages using "notes". When satisfied with the outline and graphic all content was copied into a Word document for final editing and any revisions.. The outline used is exactly as it appears on the attached Inspiration graphic. This procedure has been detailed because "Inspiration" is an excellent tool for designing a written project as well as in class instruction or project planning.

Preparation of vocational education teachers

Teacher preparation is critical.

In general

> "up to one third of all new teachers quit within the first five years",

Education Week, March 1999, as referred to from a report by Ingersoll, R.(University of Georgia). "Making the best of a learning experience", (p.20-2) Backes, C. & Backes. L. Techniques, May 1999.

Recruiting and supporting teachers is a challenge. In recent research on the attitudes of teachers in general

> "Only one in five teachers told a national survey they felt very well prepared to work in a modern classroom. Specifically, only about 20 percent said they were confident in using modern technology or in working with students from diverse backgrounds, with limited proficiency in English or with disabilities. Overall, less than half of American teachers reported feeling 'very well prepared' to meet many of the challenges facing the nation's public school classrooms."

U.S. Department of Education "Teachers Report Need for More Preparation"., January 28, 1999, National Conference on Teacher Quality Exemplary Practices, National Center for Education Statistics.
http://www.ed.gov/inits/teachers/exemplarypractices/#prep

Supporting the need for continuing professional development

> "...those engaged in more than eight hours of training were far more likely to conclude that their teaching ability was improved 'a lot.' Likewise, teachers who were involved in frequent planning and collaboration with other teachers were more likely to report that it helped."

U.S. Department of Education "Teachers Report Need for More Preparation"., January 28, 1999, National Conference on Teacher Quality Exemplary Practices, National Center for Education Statistics.
http://www.ed.gov/inits/teachers/exemplarypractices/#prep
The point is, initial and continued connection between the teacher and anyone involved in their development must be maintained.

Just as business and industry mandate for their employees, VE teachers must know

> "how to work in teams and collaborate with academic teachers to integrate curricula and promote contextual learning"

(Heathcamp, B. "Learning survival skills together" Lozada, M. Techniques May 1999, ACTE.

Contextual learning is "hot terminology" right now, but is a method, which has been used in VE all along. The State of Georgia developed a related project. The objective was to:

> "Develop and implement a pre-service teacher education model where students: (a) complete courses, seminars, and experiences in professional education and content areas which integrate contextual teaching and learning concepts into instruction; (b) use experiences in community, workplace, and school contexts to inform teaching and learning; and (c) are prepared to use contextual teaching strategies."

TeachNET--A Professional Development Network for Contextual Teaching and Learning http://www.ed.gov/offices/OVAE/nahs/teachnet.html

Again contextual teaching and learning is promoted, but is a technique used by VE teachers all along.

In 1977 in Florida, Joe Mills, then Director of Vocational Education for the State, offered these comments from a report on VE preparation and competency based education.

> "1) there are a set of commonly agreed-upon competencies central to the individualization of competency-based instruction; (2) FACIT is a unique approach that includes elements of many other theoretical and practical approaches; and (3) FACIT provides a model for the concepts it is designed to teach."

Mills, J. D. (1977).Development and Validation of a Competency-Based Preservice/Inservice Learning System for Vocational Teachers. Final Report. . ED186770 http://ericir.syr.edu/plweb-cgi/fastweb?search

Even two decades ago, supporting women in non-traditional areas of VE teaching was discussed.

> "The impetus for developing a model to retrain women teachers and skilled women to become teachers in traditionally male-intensive secondary vocational education has emerged from a combination of problems and issues. The most pertinent of these involve the factors of supply and demand, coupled with the need to reduce sex stereotyping and bias in employment. …The major conceptual issues that must be addressed in proposing a retraining model include the characteristics of the women for whom the program is being designed, the certification requirements of the state, job growth potential, and time required to attain skill levels and operate the retraining model. Recruitment practices, selection of applicants for pilot programs counseling, and various support

programs must be carefully planned to insure that the first group of women entering these positions has a positive and successful experience."

Kane, R. D. (1978). Preparing Women to Teach Non-Traditional Vocational Education. Information Series No. 137. Virginia, U.S. ED164978.

Non-traditional teachers and students abound in VE now, but the need to recruit and support these groups is still critical. Although a non-research, a bit of prose is offered to describe feelings by those non-tradition teachers and students.

Continuous recruiting of prospective teachers is important. Former President of ACTE Daisy Stewart offers 10 tips:

1. talk to teens
2. search from within
3. seek counsel
4. find those on the fence
5. talk among your selves
6. talk on tech prep
7. seek military intelligence
8. extend your offer
9. find the job seekers
10. use distance learning

Stewart, D. "10 ways to recruit teachers", (p.20-2) Lozada, M. Techniques, May 1998.

Once VE teachers are recruited, retention through support is paramount. One example is a print form handbook. Such a handbook was developed in Indiana in the late 1980's.

> "This handbook is designed to familiarize the beginning secondary vocational teacher with the legal requirements and guidelines for the Indiana assistantship program for vocational teacher licensing and to assist that teacher in satisfactorily completing the assistantship.... includes a discussion of the features of the occupational specialist certificate; an outline of requirements for the certificate; an overview of the beginning teacher assistantship program; a list of the expectations and responsibilities of the vocational administrator, the university representative, the mentor (an outstanding experienced teacher who provides assistance and support but who does not evaluate the beginning teacher), and the beginning teacher; and the standards for the occupational specialist certificate. Appendices provide a checklist of the certification requirements, Indiana state certification rules, criteria for selecting mentors, a beginning teacher assistantship inventory, observation record forms, sample discussion items for meetings between beginning teachers and mentors, a list of the most frequently perceived problems of beginning teachers, and a form for requesting evaluation of credentials for occupational specialist certification.."

Center for the Development of Vocational Education Professional Personnel. Final Report for Academic Year 1987- 1988 (July 1, 1987 to June 30, 1988).
Beginning Teacher Handbook. Occupational Specialist I, II, III. Indiana, U.S.(1990) ED319973

Back in the late 1980's, well over a decade ago, upheavals occurred in many traditional VTE preparation programs. From one perspective in 1987,

> "...vocational teacher pre-service preparation gives little or modest attention to preparation for teaching basic skills and special student populations."

ERIC_NO: ED291971 Vocational Teacher Education: A Survey of Preservice and Inservice Preparation. Pratzner, Frank C. 1987
http://ericir.syr.edu/plweb-cgi/fastweb?search

While in Pennsylvania, during the same time period the Center for Vocational Personnel Development at the University of Pittsburgh

> "provided pre-service and in-service development of professional vocational education personnel for comprehensive high schools and area vocational-technical schools in the southwestern region of Pennsylvania since the mid-1970s. Although field- based, performance-based teacher education programs had been offered in the early 1980s, they have been phased out because of lack of response. The center will continue to conduct formal and informal needs surveys to determine when such off-campus courses are appropriate and will then offer them."

Pennsylvania, U.S.: 06/30/1988, ED326722.

Certification
Back in 1990 VE teacher certification in Florida the so-called "non-degreed" or "non-academic" (FS 231-361) status was legislatively changed. Certification authority was given to local school districts as noted on the Web page of Teacher Certification

> "All occupational coverages are issued by employing school districts."

(http:www.firn.edu/doe/bin00022subjlist.htm#nondegree).

While many districts followed existing state guidelines for university courses, some districts developed their own process and support system. In all reality this "wake-up" call was positive as it forced VTE programs to stay in communication with school districts and serve their customers more realistically, as it were.

Also there is a trend of entering VE teachers to already have a Bachelor's degree, and while the number is still small, avenues for this new group should be developed. This appears to be more of a hiring decision and for accreditation requirements that any other reason. Alternative certification as defined by state certification does not appear to be the most viable route and useful content for these occupationally experienced teachers.

There is also some confusion about number of credit hours required and even specific approved courses. It appears that a consistent lack of communication among all constituencies still exists, and should be corrected to better prepare and support the VE teachers.

Requirements to successfully pass the FCTE Professional exam appear contradictory. On the one side no one could argue with the intent of the exam (kind of apple pie and the flag) however it is unfair to require new "non-degreed" teachers to take an exam for which they are not prepared by content or teat taking. The content in this exam is based upon college courses, generally offered through Educational Foundations departments and for which both the terminology and content is not always relevant to the VE teacher. (For example in the UCF program the non-degreed students do not take the Educational Foundations courses as part of teacher certification preparation nor do most take them as part of their degree.)

Additionally, and related to state testing, the required "Subject matter exam" is based upon content of courses completed at a technical institute and transferred to a community college. Expertise in an occupational area is generally a hiring requirement, but when new hires are asked to take a state subject matter exam it should be understood that the new teacher may have little experience at standardized test taking or the educational terminology used.

Lack of understanding and coordination of VE teacher certification is not a new problem as supported by a report back in 1977.

> "...vocational association presidents and executive directors revealed that they were not so aware of the current status, potential problems, and issues related to the certification of vocational education personnel as are state department of education employees."

The report offered specific recommendations, which should be revisited

> " ... (1) The American Vocational Association should establish a standing committee on professional standards; (2) state vocational associations should appoint committees to monitor legislation which affects the certification of vocational personnel; (3) state vocational associations should include a professional standards goal in their program of work; (4) state vocational associations should have a vocational educator on any board for teacher education certification; and (5) state vocational associations should work in partnership with state divisions of vocational education to assure that minimum certification standards for vocational educators are explicit and adhered to."

Miller, A. J.; Roehrich, R. R. (1977). The Certification of Vocational Education Personnel. A Report of the AVA ad hoc Committee on Professional Standards.. ED152995.

No recent reports on across state VE teacher certification were found through ERIC search. What is the current "picture" of VE teacher certification or qualification in the US?

Users

There are new groups of users; that is, different groups of customers for "certification" (I prefer the term teacher qualification) even if certification is not the acceptable term. In prisons Department of Corrections VE teachers follow the same certification guidelines, as the DoC is as school district by definition. As we all know prisons are hardly ever built in the middle of town or near a university so the use of alternative methods of serving these teachers is mandated.

Other customers include teachers in community colleges, where a technical background is also used in hiring. A lack of teacher preparation of this group also includes them as candidates for "certification" type preparation.

Two other groups exist. Those who are technical trainers in business or industry or in the military or those who just retired from the military and are entering teaching or who are currently I the military and stationed somewhere around the world. These are the new customers—hence, the old way of serving one customer group in one location by one method just will not work.

Even the content is changing, because of research and political agendas or legislation."

> "Educators need a solid understanding of reform principles and the ways that work- and school-based learning can enhance curriculum and instruction. And higher education institutions must develop a new vision for teacher education programs to align with education-and-work reforms and other standards-based educational reforms."

Rethinking Teacher Education Programs
http://www.cew.wisc.edu/cew/NCRVE/ovrvw298.htm

Furthermore

> "Colleges and universities initially did not respond well to tech prep, integration efforts, and school to work"

Lynch, R. (p.14) "Learning survival skills together", Lozada, M. Techniques ,May 1998.

> "We're preparing them how to teach…and they go train (employees) in the private sector".

(Washburn, J. (p.15). "Learning survival skills together", Lozada, M. Techniques ,May 1998.

Maybe a new research project by NCCTE can help us out. They state

> " The quality of CTE programs can only be as good as the quality of CTE teachers, and the quality of CTE teachers can only be as good as the quality of CTE teacher education programs. Pre-service CTE teacher education programs must address the changing educational and technological competencies CTE teachers need today in an effective and systematic way. This project will establish a data warehouse documenting the status of CTE teacher education programs nationwide and will analyze effective and innovative models of pre-service CTE teacher education to determine what lessons they provide for others."

"Totally Engaged in Preservice Development: From Data to New Designs", directed by Thomas H. Bruening, Dennis C. Scanlon, and M. Susie Whittington, The Pennsylvania State University
http://www.nccte.com/publications/infosynthesis/newsletter/2000spring/2000sp-ctc.pdf

Whether it is alarming, or merely informing, in a recent study of VE teachers

> "…59% of respondents agreed that students who have met entry-level skill standards have smoother school-to-work transitions, only 39% believed that national skill standards enhance vocational education. ... 37% believed that national skill standards would improve their particular program, 55% stated that national skill standards should have a positive effect on work force productivity, 60% stated that national skill standards provide the basis for measuring individuals' ability, 32% were not at all familiar with the national skill standards for their vocational program, 69% use employability skills to assess students' abilities in the vocational area they teach, and 52% believed that national skill standards will lower employer recruiting costs."

Belcher, G.; McCaslin, N. L. (RIEJUL97). Vocational Teachers' Attitudes toward, Knowledge of and Use of National Skill Standards.

Delivery

As stated above, old ways will not work in the new markets! Out of the box, as the saying goes, or time to use a new paradigm; it's all the same, serve the market or lose the market.

If we as constituents in VE teacher development did not use the technologies available to develop and support our VE teachers we would be remiss in our professional responsibilities. Not only would we be doing a disservice to them, but the students in their classes would be frustrated at the lack of interactive strategies using technologies.

Constructivism, an additive means of learning, is especially supported through Web based technologies. This was recently supported in an article noting that using the Web provides:

- "full rich information
- for differences among learners
- learning activities which foster construction of meaning
- the instructor as guide, facilitator, or coach"

"Web-based training and constructivism", Wanocott, M., InBrief, 2000, no. 2
http://www.nccte.com/publications/infosynthesis/in-brief/inbrief02-webtraining.pdf

Communication among groups

It has already been noted that the perception (of the author) is that a lack of communication among all constituents involved in the preparation, certification, and support of VE teachers is apparent. Isn't the time over for territorialism, ownership, and control? Aren't we all here to provide the best teachers we can get for our students—our children and adults?

Groups which should be communicating on a regular basis are:

- Florida DOE
  - Workforce Development
  - Certification
- Universities
  - Colleges of Education
  - Programs in VTE
  - Other faculty on campus
- School districts liaisons
  - Vocational administrators
  - Certification officers/Personnel
  - School site directors/hiring contacts

    - Teachers
- Community college liaisons
    - Deans/Directors
    - Personnel
- Department of Corrections
    - Administrative liaison
    - Site hiring contact
- Business & industry liaison
    - Technical areas
    - Training and development
- Military liaisons

Conclusions

It has not been the intent of the author to deride what we have, but to prod us into providing high quality support and excellent Vocational Education teachers to the children and adults of Florida. Your replies and comments are requested.